

GLOBE Trainer and Mentor Trainer Qualifications and Certification Process

The GLOBE Program has a long history of building the capacity of its community by certifying GLOBE Trainers. The result is a vibrant, growing community with members who are equipped to accomplish the mission and strategic goals of GLOBE¹. To accomplish this, it is important to have GLOBE Trainers leading GLOBE workshops who are knowledgeable in the GLOBE program with a firm understanding of protocols, procedures, quality of data being collected and recorded, and who can guide teachers on how to implement GLOBE in their educational setting. These GLOBE Trainers must be able to educate, as well as support, teachers to ensure GLOBE protocols are properly being conducted.

Within this training process,

Candidate Trainers are individuals seeking accreditation to be a formal GLOBE Trainer. They must provide documentation of their competency in four critical areas: (1) Science, (2) Education, (3) Adult Learning, and (4) Knowledge of GLOBE. Candidate Trainers will work with a Mentor Trainer to lead a GLOBE Workshop under the guidance and supervision of this Mentor Trainer. When this observation and assessment of the workshop is fully satisfied, the Mentor Trainer may or may not recommend certification to the specific GLOBE Country Coordinator (or Regional Coordinator Office when no Country Coordinator is available). If certification is recommended by the Mentor Trainer and reviewed and endorsed by the Country Coordinator, the Country Coordinator will send all documentation to the GLOBE Education Working Group for final approval and certification as a GLOBE Trainer. The GLOBE Country Coordinator will then notify the GLOBE office of the certification for inclusion in the Trainer database.

Candidate Mentor Trainers are individuals seeking accreditation to be a formal Mentor Trainer to GLOBE Trainers. They must provide documentation of their competency in four critical areas: (1) Science, (2) Education, (3) Adult Learning, and (4) Knowledge of GLOBE. If possible, Candidate Mentor Trainers will work with a Mentor Trainer to assist Candidate Trainers in leading a GLOBE Workshop under the guidance and supervision of this Mentor Trainer.

Trainers (and Mentor Trainers) are certified to train educators in various GLOBE scientific protocols, educational activities, and GLOBE science research process. GLOBE Trainers are the front-line ambassadors from GLOBE to faculty and teachers from elementary through university and the general public. GLOBE trainers work with their audiences to promote GLOBE and the many resources and opportunities available to enhance learning experiences. Trainings can range from introductory awareness sessions to in-depth protocol trainings to promote student investigations. It is not expected that Trainers should offer training for all protocols but should seek certification for protocols in which the Trainer is confident in both science content knowledge and understanding of the protocol. Please note: the terms Trainer and Master Trainer have been combined into one term, Trainer. The term Master Trainer will no longer be used.

Mentor Trainers aid in advancing the community of Trainers by mentoring Candidate Trainers. It is not expected that all Trainers will want to become Mentor Trainers. Only those active Trainers with a passion for serving the GLOBE community by actively mentoring, observing, and assessing Candidate Trainers should seek this designation. Mentor Trainers should be scientifically competent to answer questions related to GLOBE protocols, encourage the use of GLOBE and other Earth system science resources, and eager to provide support and guidance to help Candidate Trainers become confident and competent to conduct their own GLOBE Trainings.

¹ *Education Goals #2. GLOBE's capacity to deliver high quality professional learning experiences (trainings) has increased (from [GLOBE Strategic Plan 2018-2023](#))*

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Certification Process to Become a GLOBE Trainer

Step 1. Application & Qualifications Review

All GLOBE Trainers should have knowledge, skills, and experiences in the critical areas of (1) Science, (2) Education, (3) Adult Learning, and (4) Knowledge of GLOBE. Applicants should review the necessary qualification criteria and the process for application submission found within the **Candidate Trainer Application and Qualification** pages (Appendix 1). Candidate Trainers should complete the form, attach all relevant documentation, and submit this to their Country Coordinator via email. This information will be reviewed by the Country Coordinator or (Regional Office when no Country Coordinator is available) for consideration. If a Candidate is found eligible, the application will be shared with the GLOBE Education Working Group who can assist in identifying a Mentor Trainer to work with the Candidate Trainer. Alternatively, the applicant may request for his/ her preferred mentor trainer.

Step 2. Review by Mentor Trainer

In order to become fully certified as a Trainer, a Candidate must conduct a GLOBE workshop and be observed using one or more GLOBE protocols with workshop participants under the mentorship and guidance of a Mentor Trainer. The Mentor Trainer must observe the training in-person, virtually, or through video submission. This observation will help evaluate the Candidate Trainer's effectiveness in skills related to 1) understanding the science behind the protocols, 2) understanding of education and learning, 3) teaching adult learners, and 4) communicating the mission of GLOBE.

The Mentor Trainer will complete an observation of the candidate using the **Candidate Trainer Workshop Observation Form** (Appendix 2), and submit it to the Country Coordinator/Regional Coordination Office Reviewer for review and evaluation. If the Country Coordinator/Regional Coordination Office Reviewer agrees with the assessment, all information will be submitted to the GLOBE Education Working Group for final approval/disapproval. If the candidate does not meet approval and requires more experience/mentoring, the Country Coordinator/Regional Coordination Office Reviewer will be notified that the candidate must provide additional evidence or meet the requirements of the accreditation process when he/she is more prepared. This can be done with the same Mentor Trainer or another one. If the candidate does meet approval, the candidate and Country Coordinator/Regional Coordination Office Reviewer and the Mentor Trainer will be notified and the Candidate Trainer's status will be changed to *Trainer* in the GLOBE database by the Country Coordinator or Regional Office.

If the candidate does not meet approval, the applicant can re-apply once he/she has acquired evidence to meet the recommended criteria. This evidence should be submitted in a time frame on which the Country Coordinator/Regional Coordination Office Reviewer and candidate agree. If the candidate does not meet approval, he/ she may file an appeal with the GIO within 3 calendar days of receiving the notice of disapproval. The GIO would then review the appeal and make a final decision and communicate the decision to candidate and regional office.

Additional Trainer Protocol Certification

Once certified, a Trainer may train in any of the particular protocol(s) in which he/she has certification. Trainers may learn about additional protocols through eTraining or by participating in a GLOBE workshop. Trainers and Candidate Trainers are strongly encouraged to participate in GLOBE workshops as a learner or assistant to other Trainers before training in additional protocol areas. It is not expected that Trainers offer training for all protocols. Trainers may seek

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additional certification for protocols in which the Trainer is confident in the science content knowledge and understanding of the protocol(s). Trainers are encouraged to update their My Page to identify the protocols in which the Trainer is interested and willing to provide GLOBE workshops.

Updated Protocols

All Trainers and Mentor Trainers must also be active and up to date with the latest version of the protocols. It is sometimes necessary to update protocols because of creation of apps and/or changes in data entry, instrumentation, or changes in science research. In this case, Trainers and Mentor Trainers must be certified in the new version of the protocol by completing the particular protocol eTraining.

Step 3. Active Status

To retain active status, all Trainers must 1) complete the GLOBE community survey each year and
2) submit documentation (Appendix 3) every three years providing evidence of continued commitment to GLOBE through:

1. GLOBE Training	<ul style="list-style-type: none"> ● Conducting at least one protocol training every two years, tracked through the GLOBE workshop database
2. GLOBE Community	<p>Participation in at least one GLOBE community activity every two years that may include but not be limited to:</p> <ul style="list-style-type: none"> ● Attending a GLOBE International, national, or regional meeting ● Serving as a reviewer for the International Virtual Science Symposium (IVSS), a Student Research Symposium (SRS), or a regional/country Science Fair ● Hosting a GLOBE GLE or SRS ● Conducting a GLOBE protocol or NASA mission related project ● Being an active member of the GISN, a GLOBE working group, or US Partner Forum ● Participating in a GLOBE Workshop ● Maintain updated GLOBE My Page ● Other

If a Trainer or Mentor Trainer lapses in “active status”, the Trainer or Mentor Trainer may submit a request to *return to active status* with related documentation to the Country Coordinator/ Regional Coordination Office Reviewer for reconsideration.

Certification Process to Become a GLOBE Mentor Trainer

GLOBE Mentor Trainers are experienced and active Trainers who aid in advancing the community of Trainers by mentoring Candidate Trainers. While Mentor Trainers provide a critical role in building the capacity of the community, it is not expected that all Trainers would wish to become Mentor Trainers. Only those active GLOBE Trainers with a passion for serving the GLOBE community by actively mentoring, observing, and assessing Candidate Trainers should seek this designation.

Mentor Trainers have substantially more experience in the same Trainer areas of (1) Science, (2) Education, (3) Adult Learning, and (4) Knowledge of GLOBE. Mentor Trainers serve as

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mentors for Candidate Trainers and, therefore, must have extensive knowledge and expertise in these four areas.

Trainers may qualify to become Mentor Trainers after two or more years of experience as an Active Trainer. Given the expectation that Mentor Trainers make themselves available to mentor and assess Candidate Trainers, it is important that Trainers who qualify for the status of Mentor Trainer complete and submit the ***Mentor Trainer Application*** (Appendix 4) documenting their expertise in GLOBE and acknowledging the expectation to serve as a mentor. If the Country Coordinator/ Regional Office acknowledges the qualifications and evidence, all documentation will be provided to the GLOBE Education Working Group for final review. If the Trainer does not meet approval and requires more experience/mentoring, the Country Coordinator/Regional Coordination Office Reviewer will be notified that the Mentor Trainer candidate must repeat the accreditation process when he/she is more prepared. If the candidate does meet approval, the candidate and Country Coordinator/Regional Coordination Office Reviewer will be notified and the Candidate Mentor Trainer will work with a GLOBE Mentor to complete the process of full certification (Appendix 5). With this final approval, the Country Coordinator/Regional Coordination Office Reviewer will notify GLOBE that the Candidate Trainer's status should be changed to *Mentor Trainer* in the GLOBE database.

Mentor Trainer Active Status

Mentor Trainers must maintain Active Trainer Status by conducting Protocol training, participating in GLOBE community events, and serving as a mentor to Candidate Trainers. To maintain "active" status, every three years a Mentor Trainer must observe and assess Candidate Trainers at least once.

To maintain active status, all Mentor Trainers must 1) complete the GLOBE Community survey each year and 2) submit documentation (Appendix 6) every three years providing evidence of continued commitment to GLOBE through:

1. GLOBE Training	<ul style="list-style-type: none"> ● Conducting at least one protocol training with candidate trainers each year tracked through the GLOBE workshop database ● Providing evidence of current depth of knowledge and related experience of new sphere protocols, web page changes, app usage, etc.
2. GLOBE Community	<p>Participation in at least one GLOBE community activity per year that may include, but not be limited to:</p> <ul style="list-style-type: none"> ● Attending a GLOBE International, national or regional meeting ● Being a reviewer for the International Virtual Science Symposium (IVSS) or a reviewer for the GLOBE Student Research Symposium (SRS) ● Hosting a GLOBE GLE or SRS ● Conducting a GLOBE protocol or NASA mission related project ● Being a member of the GISN, a GLOBE working group or US Partner Forum ● Other GLOBE community activity attested by Country Coordinator
3. Mentorship of Trainer Candidates	Mentoring at least one Candidate Trainer during the documented time period (once every three years)

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4. Observation and Assessment of Candidate Trainer Workshops	Observing and assessing a Candidate Trainer during at least one Protocol training workshop led by a Candidate Trainer during the documented time period (once every three years)
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APPENDICES (Forms found on the GLOBE Trainer web page:

Appendix 1: Candidate Trainer Application

Appendix 2: Candidate Trainer Workshop Observation Form

Appendix 3. Current Trainer Active Status Form

Appendix 4. Mentor Trainer Application

Appendix 5. Mentor Trainer Workshop Observation Form

Appendix 6. Mentor Trainer Active Status Form